



DOCKET NO.: JJPR-0043

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Timothy W. Lovenberg, et al.

Application No.: 10/727,021

Filing Date: December 2, 2003

For: DNA ENCODING A HUMAN HISTAMINE RECEPTOR OF THE H3  
SUBTYPE

Confirmation No.:

Group Art Unit: Not Yet Assigned

Examiner: Not Yet Assigned

DATE OF DEPOSIT: March 2, 2004

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TYPED NAME: Felicity E. Groth  
REGISTRATION NO.: 47,042

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 CFR § 1.56 and in accordance with 37 CFR §§ 1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 CFR § 1.56(b).

- ☒ In accordance with § 1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified application, within three months of the date of entry into the national stage of

the above identified application as set forth in § 1.491, before the mailing date of a first Office Action on the merits of the above-identified application, or before the mailing date of a first Office Action after the filing of request for continued examination under § 1.114, no additional fee is required.

☐ In accordance with § 1.129(a), this Information Disclosure Statement is being filed in connection with ☐ the first or ☐ second After Final Submission, therefore:

☐ Certification in Accordance with § 1.97(e) is attached; or

☐ The fee of **\$180.00** as set forth in § 1.17(p) is attached.

☐ In accordance with § 1.97(c), this Information Disclosure Statement is being filed after the period set forth in § 1.97(b) above but before the mailing date of either a Final Action under § 1.113 or a Notice of Allowance under § 1.311, or before an action that otherwise closes prosecution in the application, therefore:

☐ Certification in Accordance with § 1.97(e) is attached;

or

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☐ In accordance with § 1.97(d), this Information Disclosure Statement is being filed after the mailing date of either a Final Action under § 1.113 or a Notice of Allowance under § 1.311 but before, or simultaneously with, the payment of the Issue Fee, therefore included are: Certification in Accordance with § 1.97(e); and the submission fee of **\$180.00** as set forth in § 1.17(p).

- ☐ Copies of each of the references listed on the attached Form PTO-1449 are enclosed herewith.
- ☐ Copies of references listed on the attached Form PTO-1449 are enclosed herewith
- ☐ Copies of references listed on the attached Form PTO 1449 are not required to be submitted pursuant to the June 30, 2003 recent revisions to 37 CFR § 1.98(a)(2)(i).

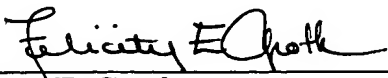
## EXCEPT THAT:

- ☐ In view of the voluminous nature of references [list as appropriate], and the likelihood that these references are available to the Examiner, copies are not enclosed herewith.
- ☒ In accordance with § 1.98(d), copies of the following references listed on the attached Form PTO-1449 are not enclosed herewith because they were previously cited by or submitted to the U.S. Patent and Trademark Office in patent application(s) for which a claim for priority under 35 U.S.C. § 120 have been made in the instant application:
  - ☒ Copies of references **1 thru 40** listed on the attached Form PTO-1449 were previously cited by or submitted to the Patent and Trademark Office in prior Application No. **09/642,852**, filed **August 21, 2000**.

Please charge any deficiency or credit any overpayment to Deposit Account No. 23-3050. This form is submitted in duplicate.

There are no listed references which are not in the English language.

Date: March 2, 2004

  
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<b>Form PTO-1449 Modified</b>  List of Patent and Publications Cited by Applicant (Use several sheets if necessary)  U.S. Department of Commerce Patent and Trademark Office	Docket No. <b>JJPR-0043</b>	Application No. <b>10/727,021</b>
	Applicant <b>Timothy W. Lovenberg, et al.</b>	
	Filing Date <b>December 2, 2003</b>	Group <b>Not Yet Assigned</b>
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>		
	<b>1</b>	Arrang, J.M. et al., "Autoinhibition of Brain Histamine Release Mediated by a Novel Class (H3) of Histamine Receptor", <i>Nature (London)</i> , <b>1983</b> , 302,(5911), 832-837
	<b>2</b>	Clark, M.A. et al., "Guanine Nucleotides and Pertussis Toxin Reduce the Affinity of Histamine H3 Receptors on AtT-20 Cells", <i>Agents Actions</i> , <b>1993</b> , 40(3-4), 129-134
	<b>3</b>	Clark, M.A. et al., "High Affinity Histamine H3 Receptors Regulate ACTH Release by AtT-20 Cells", <i>Eur. J. Pharmacol</i> , <b>1992</b> , 210(1), 31-35
	<b>4</b>	Gantz, I. et al., "Molecular Cloning of a Gene Encoding the Histamine H2 Receptor", <i>Proc. Natl. Acad. Sci. U.S.A.</i> , <b>1991</b> , 88(2), 429-433
	<b>5</b>	Hill, S.J. et al., "International Union of Pharmacology. XIII. Classification of Histamine Receptors", <i>Pharmacol. Rev.</i> , <b>1997</b> , 49(3), 253-278
	<b>6</b>	Konig, M. et al. "Method for Identifying Ligands that Bind to Cloned Gs-or Gi Coupled Receptors", <i>Mol. Cell. Neurosci</i> , <b>1991</b> , 2(4), 331-337
	<b>7</b>	Lovenburg, T. et al., "Cloning and Functional Expression of the Human Histamine H3 Receptor", <i>Molecular Pharmacology</i> , <b>1999</b> , 55, 1101-1107
	<b>8</b>	Pollard, H. et al., "A Detailed Autoradiographic Mapping of Histamine H3 Receptors in Rat Brain Areas", <i>Neuroscience</i> , <b>1993</b> , 52(1), 169-189
	<b>9</b>	Yamashita, M. et al., "Expression Cloning of a cDNA Encoding the Bovine Histamine H1 Receptor", <i>Proc. Natl. Acad. Sci. U.S.A.</i> , <b>1991</b> , 88(24), 11515-11519
	<b>10</b>	Backer, M.D. et al., "Genomic Cloning, Heterologous Expression and Pharmacological Characterization of a Human Histamine H1 Receptor", <i>Biochemical and Biophysical Research Communications</i> , <b>December 1993</b> , 197(3), 1601-1608
	<b>11</b>	Cherifi, et al., "Purification of a Histamine H3 Receptor Negatively Coupled to Phosphoinositide Turnover in the Human Gastric Cell Line HGT1, <i>the Journal of Biological Chemistry</i> , <b>1992</b> , 267(35), 25315-25320
<b>EXAMINER</b>		<b>DATE CONSIDERED</b>

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U.S. Department of Commerce Patent and Trademark Office		Filing Date <b>December 2, 2003</b>	Group <b>Not Yet Assigned</b>
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>			
	<b>12</b>	Bellon, et al., "Purification and Biochemical Characterization of Recombinant Hirudin Produced by <i>Saccharomyces Cerevisiae</i> ", <i>Biochem</i> , <b>1989</b> , 28, 2941-2949	
	<b>13</b>	Ecker, et al., "Increasing Gene Expression in Yeast by Fusion to Ubiquitin", <i>J. Biol. Chem</i> , <b>1989</b> , 264(13), 7715-7719	
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	<b>17</b>	Kaufman, R.J. et al., "Amplification and Expression of Sequences Contransected with a Modular Dihydrofolate Reductase Complementary DNA Gene", <i>J. Mol. Biol.</i> , <b>1982</b> , 159, 601-621	
	<b>18</b>	Kitts, et al., "Linearization of Baculovirus DNA Enhances the Recovery of Recombinant Virus Expression Vectors", <i>Nuc. Acid. Res.</i> , <b>1990</b> , 18(19), 5667-5672	
	<b>19</b>	Kohler, G. et al., "Continuous Cultures of Fused Cells Secreting Antibody of Predefined Specificity", <i>Nature</i> , <b>1975</b> , 256, 495-497	
	<b>20</b>	Leurs, R. et al., "Therapeutic Potential of Histamine H3 Receptor Agonists and Antagonists", <i>Trends in Pharmacological Sciences, Elsevier Trends Journal</i> , <b>1998</b> , 19(5), 177-184, XP 004121095	
	<b>21</b>	Leurs, R. et al., "Pharmacological Characterization of the Human Histamine H2 Receptor Stably Expressed in Chinese Hamster Ovary Cells", <i>British Journal of Pharmacology</i> , <b>1994</b> , 112, 847-853, XP 002916164	
	<b>22</b>	Gespach, et al., <i>Journal of Clinical Investigation</i> , <b>1988</b> , 19, 1-10	
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	<b>23</b>	Leurs, R. et al., "The Histamine H3-Receptor: A Target for Developing New Drugs", <i>Prog. Drug. Res.</i> , <b>1992</b> , 39, 127-165	
	<b>24</b>	McDonnell, et al., "Reconstitution of the Vitamin D-Responsive Osteocalcin Transcription Unit in <i>Saccharomyces Cerevisiae</i> ", <i>Mol. Cell. Biol.</i> , <b>1989</b> , 9(8), 3517-3523	
	<b>25</b>	Rinas, et al., "Characterization of Recombinant Factor XIIIa Produced in <i>Saccharomyces Cerevisiae</i> ", <i>Bio/Technology</i> , <b>1990</b> , 8(6), 543-546	
	<b>26</b>	Sabin, et al., "High-Level Expression and In Vivo Processing of Chimeric Ubiquitin Fusion Proteins in <i>Saccharomyces Cerevisiae</i> ", <i>Bio/Technology</i> , <b>1989</b> , 7(7), 705-709	
	<b>27</b>	Sieckevitz, et al., "Activation of the HIV-1 LTR by T Cell Mitogens and the Trans-Activator Protein of HTLV-I", <i>Science</i> , <b>1987</b> , 238, 1575-1578	
	<b>28</b>	Sleep, et al., "The Secretion of Human Serum Albumin from the Yeast <i>Saccharomyces Cerevisiae</i> Using Five Different Leader Sequences", <i>BioTechnology</i> , <b>1990</b> , 8, 42-46	
	<b>29</b>	Tedford, et al., "Development of Trans-2-[1H-imidazol-4-yl] Cyclopropane Derivatives as New High-Affinity Histamine H3 Receptor Ligands", <i>J. Pharmacol. Exper. Therapeutics</i> , <b>1999</b> , 289(2), 1160-1168	
	<b>30</b>	Wigler, et al., "Transfer of Purified Herpes Virus Thymidine Kinase Gene to Cultured Mouse Cells", <i>Cell</i> , <b>1977</b> , 11(1), 223-232	
	<b>31</b>	Yamamoto, et al., "Important Role of the Proline Residue in the Signal Sequence that Directs the Secretion of Human Lysozyme in <i>Saccharomyces Cerevisiae</i> ", <i>Biochemistry</i> , <b>1989</b> , 28(6), 2728-2732	
	<b>32</b>	Lovenburg, et al., "Cloning of Rat Histamine H3 Receptor Reveals Distinct Species Pharmacological Profiles", <i>JPET</i> , <b>February 2000</b> , 293(3), 771-778	
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**December 2, 2003**

Group  
**Not Yet Assigned**

**U. S. PATENT DOCUMENTS**

Examiner Initial		Document No.	Date	Name	Class	Subclass
	<b>34</b>	5,817,480	10/06/98	Murry, et al.	435	69
	<b>35</b>	5,882,893	03/16/99	Goodearl	435	69
	<b>36</b>	6,136,559	10/24/00	Lovenberg, et al.	435	69.1
	<b>37</b>	6,413,743 B1	07/02/02	Lovenberg, et al.	435	69.1
	<b>38</b>	6,437,100 B1	08/20/02	Lovenberg, et al.	530	391.1

**FOREIGN PATENT DOCUMENTS**

Examiner Initial		Document No.	Date	Country	Translation	
					YES	NO
	<b>39</b>	EP 1 043 395 A1	10/11/00	EPO		
	<b>40</b>	WO 99/28470	06/10/99	PCT		

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